FIELD INSPECTION REPORT FOR MILL CREEK DISTRIBUTION SYSTEM

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Field Inspections date: May 30-31, 2002.

1. WILSON MESA DITCH

The North Mesa diversion consists of a 15-inch culvert which is located at Warner Lake. An 18-inch flume, located downstream from the Lake, was inspected and found to be level from side to side but sloping upward 0.8 inches across a 10-ft length span. The ditch channel upstream from the flume was full of vegetation and debris. The vegetation on the right bank of the ditch is so overgrown that restricts the channel and a bend has been created. This causes the flows to enter the flume at an angle.

The commissioner indicated that the 15-inch pipeline that carries the flows from Warner Lake is leaking at several locations. Therefore, the flow measured at the flume does not reflect the amount of water being diverted. It was not possible to measure the flows by the flume because of low flows. The amount of water flowing was estimated at 0.10 cfs. Flow readings were measured at the pipe intake by the Lake. The diversion was diverting 0.48 cfs of water.

Recommendation: The flume needs to be reset and vegetation in the upstream and downstream channel removed. The approach channel on the right side of the flume should be straightened so that the flow entering the flume is uniformly distributed.

2. WILSON MESA FLUME ABOVE WARNER LAKE

There is a 12-inch parshall flume which is submerged. The channel section immediately upstream from the flume is full of sediment. The ditch is very flat in this channel.

Recommendation: The flume should be moved approximately 100 ft upstream from its current location. The channel where

the flume is to be reinstalled should be kept free of debris and sediment deposition.

3. SOUTH MESA DIVERSION

The control structure (wheel head gate) is in good condition and performing well. There is a one-ft parshall flume downstream a few feet from this diversion. The flume is in good condition. A good hydraulic jump is formed from the flows exiting the flume. The channel is clean and free of sediment deposition. The flume was out of level from side to side by approximately 0.5 inches. The commissioner indicated that he is compensating by taking level measurements in both sides of the flume and averaging the values. Water was measured at 1.8 cfs while readings using the gaging table indicated a flow of 1.75 cfs.

Recommendation: None, the flume is operating within acceptable levels.

4. HORSE CREEK

There is a 9-inch flume at this diversion. The flume is level and working properly. There is a slide gate at the diversion in marginal condition. The ditch is clean. Water was measured at 0.32 cfs.

Recommendation: None

5. KEN'S LAKE TUNNEL DIVERSION HEADGATE

The diversion works' structure diverts water to Ken's Lake through a tunnel. The control structure is working properly. No problems were observed at this diversion. At the tunnel's outlet there is a propeller meter that measures the diverted flows. The meter seems to be working properly.

Recommendation: None

6. MOAB IRR. CO #5 SPLITTER

This splitter diversion serves water to Janie Walker, Holyoak, Engleman, and others. There is a new propeller meter installed in the pipe. The meter is working properly.

Recommendation: None

7. JANIE WALKER DIVERSION DAM

This is the main diversion dam and control structure to Janie Walker. There is a 1-ft parshall flume in a manhole that measures the flows before the water is split at Diversion #5. There is a meter downstream of each of the two splits in the diversion. By adding the flows at these meters and subtracting the values from the total flows at the flume, the overflow can be determined.

Recommendation: None

8. SCHUMAKER WELL #3

This well can be use in one or two ways. It can be used to fill the city water tank or to supplement irrigation water in the canal. There is a propeller meter installed in each line. The principal use of this well has been to pump water to the creek for irrigation.

Recommendation: None

9. JANIE WALKER METER

There is a new impeller meter installed in a 12-inch pipeline adjacent to Waker's property. The meter seems to be working properly. The commissioner indicated that the meter was reinstalled at an angle to prevent plugging up with sand or debris.

Recommendation: None

10. MOAB IRR. DIVERSION #2

There is a telemetry system installed at this site with automatic control gates. There is a propeller meter (Data Industrial model # 1400) installed in a pipeline downstream from the diversion point. At the time of the visit there was no water being diverted, therefore we could not determine if the meter was working properly. However, the commissioner indicated that the meter is working properly.

Recommendation: None.

11. MOAB IRR. DIVERSION #1

Diversion #1 uses the same concrete diversion dam structure as Diversion #2. Downstream from this diversion dam there is a 2-ft parshall flume and a headgate inside a manhole. Further downstream by the Elementary School this diversion splits into Diversion #3 and #4 at which point there is a McCrometer meter installed in a 15-inch pipeline. The setting at this split diversion is working well now.

Recommendation: None.